

1. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(-7, -2) \text{ and } (-10, 8)$$

- A. $m \in [3.33, 4.33]$ $b \in [36.33, 45.33]$
B. $m \in [-7.33, 2.67]$ $b \in [18, 20]$
C. $m \in [-7.33, 2.67]$ $b \in [18.33, 31.33]$
D. $m \in [-7.33, 2.67]$ $b \in [-28.33, -23.33]$
E. $m \in [-7.33, 2.67]$ $b \in [1, 7]$
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2. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(-18x + 9) = -3(10x - 16)$$

- A. $x \in [0.66, 0.74]$
B. $x \in [0.08, 0.16]$
C. $x \in [0.18, 0.26]$
D. $x \in [-0.16, -0.11]$
E. There are no real solutions.
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3. Solve the equation below. Then, choose the interval that contains the solution.

$$-6(18x + 2) = -10(5x + 17)$$

- A. $x \in [-1.74, -0.02]$
B. $x \in [2.73, 3.93]$
C. $x \in [-3.5, -2.9]$
D. $x \in [1.45, 3.12]$
E. There are no real solutions.

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4. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(-8, -4) \text{ and } (4, 4)$$

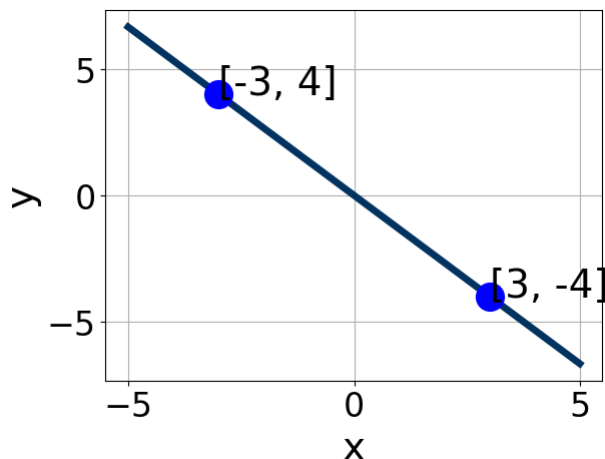
- A. $m \in [0.3, 3.3]$ $b \in [-0.77, 1.26]$
B. $m \in [0.3, 3.3]$ $b \in [3.59, 4.14]$
C. $m \in [0.3, 3.3]$ $b \in [0.04, 1.6]$
D. $m \in [-2.1, -0.3]$ $b \in [6.35, 6.99]$
E. $m \in [0.3, 3.3]$ $b \in [-1.61, -0.27]$
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5. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $4x - 5y = 7$ and passing through the point $(-8, 4)$.

- A. $m \in [-2.28, -1.2]$ $b \in [12, 13]$
B. $m \in [-0.19, 1.43]$ $b \in [14, 16]$
C. $m \in [-2.28, -1.2]$ $b \in [-13, -5]$
D. $m \in [-2.28, -1.2]$ $b \in [3, 8]$
E. $m \in [-1.11, 0.29]$ $b \in [-13, -5]$
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6. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-5.1, -1.8]$, $B \in [-4.02, -2.14]$, and $C \in [-6, 2]$
 B. $A \in [-0.5, 2.4]$, $B \in [0.14, 2.7]$, and $C \in [-6, 2]$
 C. $A \in [2.8, 6.2]$, $B \in [-4.02, -2.14]$, and $C \in [-6, 2]$
 D. $A \in [-0.5, 2.4]$, $B \in [-1.95, 0.43]$, and $C \in [-6, 2]$
 E. $A \in [2.8, 6.2]$, $B \in [2.21, 3.98]$, and $C \in [-6, 2]$

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-5x - 4}{7} - \frac{-3x + 8}{3} = \frac{6x - 9}{8}$$

- A. $x \in [-5.2, -3.2]$
 B. $x \in [-1.7, 0.7]$
 C. $x \in [-7.3, -5.8]$
 D. $x \in [5.9, 7.5]$
 E. There are no real solutions.

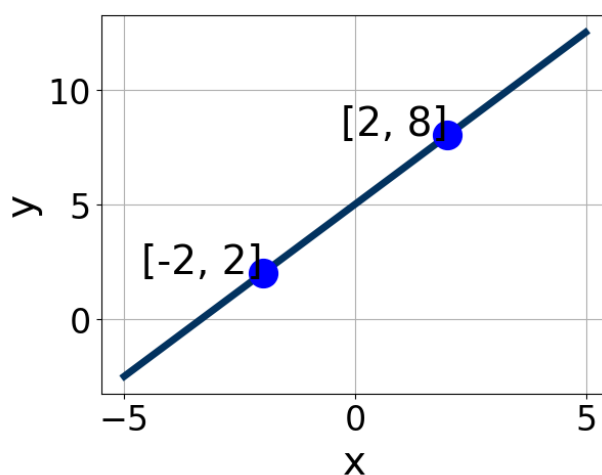
8. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-5x + 3}{5} - \frac{-9x + 9}{7} = \frac{9x + 9}{8}$$

- A. $x \in [-2.3, -0.9]$

- B. $x \in [-18.2, -17.2]$
- C. $x \in [0.4, 1.8]$
- D. $x \in [-2, 0.1]$
- E. There are no real solutions.

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9. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [-5.4, -2.4]$, $B \in [1.11, 3.02]$, and $C \in [6, 11]$
- B. $A \in [-2, -1.4]$, $B \in [-1.36, -0.52]$, and $C \in [-6, -3]$
- C. $A \in [-2, -1.4]$, $B \in [0.67, 1.45]$, and $C \in [4, 7]$
- D. $A \in [1.6, 5.1]$, $B \in [1.11, 3.02]$, and $C \in [6, 11]$
- E. $A \in [1.6, 5.1]$, $B \in [-2.35, -1.69]$, and $C \in [-14, -7]$

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10. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $6x - 5y = 12$ and passing through the point $(9, 5)$.

- A. $m \in [-1.37, -1.11]$ $b \in [11.5, 14.5]$
- B. $m \in [0.34, 1.39]$ $b \in [-3.5, -1.5]$

C. $m \in [-0.93, -0.78]$ $b \in [-12.5, -11.5]$

D. $m \in [-0.93, -0.78]$ $b \in [-5, -3]$

E. $m \in [-0.93, -0.78]$ $b \in [11.5, 14.5]$
